

REMARKS

Claims 1–4, 7–12, 15, 16, 18, and 22 are pending in this application. Non-elected claims 15, 16, and 18 are withdrawn from consideration by the Examiner. By this Amendment, claims 1–4, 7–12, 15, 16, and 18 are amended, claims 6, 17, 20, and 21 are canceled, and claim 22 is added. Support for the amendments to the claims may be found, for example, in the original claims. No new matter is added.

In view of the foregoing amendments and following remarks, reconsideration and allowance are respectfully requested.

I. Telephone Interview

The courtesies extended to Applicants' representative by Examiner Thomas during the telephone interview held February 20, 2008, are appreciated. Applicants appreciate the Examiner withdrawing the Office Action mailed December 11, 2007 in favor of the Supplemental Office Action mailed March 21, 2008.

II. Personal Interview

The courtesies extended to Applicants' representative by Examiner Thomas at the interview held May 22, 2008 are appreciated. The reasons presented at the interview as warranting favorable action are incorporated into the remarks below, which constitute Applicants' record of the interview.

III. Restriction Requirement

The Office Action indicates that the previous requirement for restriction of invention groups, as discussed in the withdrawn Office Action, is still deemed proper and is therefore made final.

However, in the withdrawn Office Action, it only addresses Applicants' traversal of the requirement to restrict between product and method claims, but never addresses Applicants' traversal of the requirement to restrict between SEQ ID NOs:8–35.

Applicants respectfully submit that the Patent Office has yet to even assert a prima facie case of lack of unity of invention between SEQ ID NOs:8–35. PCT Rule 13.2 governs the situation involving a single claim that defines alternatives, or so-called "Markush practice." In order to properly require a restriction between members of a Markush group of polynucleotides, the Office Action must establish that there is a lack of unity of invention between the recited polynucleotides. To do this, the Office Action must show that the polynucleotides do not share a common property or a significant structural element that is essential to the common property. *See, e.g.*, ISPE 10.52; MPEP §1850(III)(B). The Office Action fails to assert or show a lack of either requirement. Therefore, the Office Action fails to show any lack of unity of invention between SEQ ID NOs:8–35 and, thus, requiring restriction to a single sequence elected from SEQ ID NOs:8–35 is clearly improper.

The specification clearly demonstrates a common property shared by SEQ ID NOs:8–35:

In addition, the sequences SEQ ID n°6 and 7 were determined as flanking an *rpoB* gene fragment comprising a zone whose variable length is approximately 720 bp and as comprising the shortest sequences specific to each bacterium species of the *Streptococcus* genus and said 4 related genera.

The inventors were therefore able to evidence species probes for each of the examined 28 bacterial species of genus *Streptococcus* and said 4 related genera, corresponding to sequences SEQ ID n°8 to 35 described in example 2 below, flanked by the consensus sequences SEQ ID n°6 and 7.

See page 14, line 30 to page 15, line 7. Thus, there is a significant structural element to each of the sequences that directly relates to the common property shared by the sequences that is relied upon in the claimed subject matter.

For at least the reasons discussed above, Applicants respectfully request that the restriction requirement be withdrawn and that each of SEQ ID NOs:8–35 be examined.

IV. Rejection under 35 U.S.C. §112, First Paragraph

The Office Action rejects claims 1–4, 6–12, and 21 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. By this Amendment, claims 6, 17, 20, and 21 are canceled, rendering their rejection moot. The remaining claims are amended, as set forth above, to require the "full-length complementary sequences" instead of "complementary sequences." However, with respect to the recitation of "sequences having at least 98.7% homology," Applicants respectfully traverse the rejection.

The specification, at page 16, lines 27–32, states:

The inventors, after analysing the different sequences and comparing pair by pair all sequences SEQ. ID n° 8 to 35, determined that the homology rate between two different sequences among said sequences SEQ ID n° 8 to 35 is a maximum rate of 98.7% Below 98.7% homology between the sequences, they identify bacteria of different species.

Furthermore, claims 1–3 recite "[a]n isolated *rpoB* gene or gene fragment," and claim 4 recites "nucleic acid sequence specific to a bacterium of genus *Streptococcus* and 4 related genera *Enterococcus*, *Gemella*, *Abiotrophia* and *Granulicatella*." Therefore, contrary to the assertions found on page 4 of the Office Action, the number of molecules and the length of such molecules encompassed by "sequences having at least 98.7% homology" are restricted by other claim limitations found in claims 1–4.

For at least these reasons, Applicants submit that the specification describe the claimed invention in sufficient detail that one skilled in the art can reasonably conclude that the inventor had possession of the claimed invention. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

V. Rejections Under 35 U.S.C. §102**A. Haselbeck**

The Office Action rejects claims 1, 3, 4, 6, and 21 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent Application Publication No. 2002/0061569 to Haselbeck et al. ("Haselbeck"). By this Amendment, claims 6 and 21 are canceled, rendering their rejection moot. As to the remaining claims, Applicants respectfully submit that the amendments made to claims 1 and 3 distinguish them over Haselbeck. With respect to claim 4, Applicants traverse the rejection.

Claim 4 recites "a nucleic acid sequence specific to a bacterium of genus *Streptococcus* and 4 related genera *Enterococcus*, *Gemella*, *Abiotrophia* and *Granulicatella*." As pointed out by the Office Action, SEQ ID NO:9089 disclosed by Haselbeck represents a sequence of *Streptococcus pneumoniae*. However, elected SEQ ID NO:8 is a sequence from the *rpoB* gene of *Streptococcus suis*. Therefore, any fragment of SEQ ID NO:8 that is 100% homologous to any fragment of SEQ ID NO:9089 cannot be considered "specific to" a single species. Thus, Haselbeck cannot possibly anticipate claim 4.

For the reasons discussed above, reconsideration and withdrawal of the rejection are respectfully requested.

B. Kunsch

The Office Action rejects claims 1–4, 6, and 21 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,420,135 to Kunsch et al. ("Kunsch"). By this Amendment, claims 6 and 21 are canceled, rendering their rejection moot. As to the remaining claims, Applicants respectfully submit that the amendments made to claims 1 and 2 distinguish them over Kunsch. With respect to claim 4, Applicants traverse the rejection.

As pointed out by the Office Action, SEQ ID NO:111 disclosed by Kunsch represents a sequence of *Streptococcus pneumoniae*. However, elected SEQ ID NO:8 is a sequence

from the *rpoB* gene of *Streptococcus suis*. Therefore, any fragment of SEQ ID NO:8 that is 100% homologous to any fragment of SEQ ID NO:111 cannot be considered "specific to" a single species. Thus, Kunsch cannot possibly anticipate claim 4.

For the reasons discussed above, reconsideration and withdrawal of the rejection are respectfully requested.

VI. New Claim

By this Amendment, new claim 22 is presented. New claim 22 depends from claim 16, which has been withdrawn from consideration by the Examiner.

VII. Rejoinder

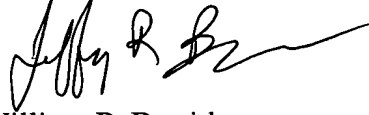
Applicants also respectfully request rejoinder of non-elected process claims 15, 16, 18, and 22. Where product and process claims are presented in the same application, Applicants may be called upon under 35 U.S.C. §121 to elect claims to either the product or process. MPEP §821.04. However, in the case of an elected product claim, rejoinder will be permitted when a product claim is found allowable and the withdrawn process claim depends from or otherwise includes all the limitations of an allowed product claim. *Id.* Because process claims 15, 16, 18, and 22 include all the limitations of product claim 7, the process claims 15, 16, 18, and 22 must be rejoined with the product claims when the product claims are found allowable. Because the product claims are believed to be allowable for at least the reasons presented above, Applicants respectfully request withdrawal of the Restriction Requirement and rejoinder of claims 15, 16, 18, and 22.

VIII. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the application are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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